Regulatory approach to Safety
Culture oversight in the CSN

Marta Barrientos Montero
Spanish Nuclear Safety Council (CSN)
1. Boundary conditions

2. Safety Culture Oversight: regulatory approaches

3. Final considerations
Boundary conditions in the Spanish Framework

- **Regulatory framework**
  - HOF Programs and specialists requested to the SNPPs
  - SISC PT-IV-224 “HOF Programs Inspection”
  - CSN GS-1.10 “Periodical Safety Reviews, PSR”
  - CSN IS-19 “Integrated Management Systems”
  - CSN IS-26 “Basic Nuclear Safety Requirements”

- **HOF Working Group**
  - CSN – Spanish nuclear industry (UNESA)

- **SC/HOF R&D Projects involving CSN, UNESA, CIEMAT, Spanish universities and foreign organizations**
  - Impact of Organization in Safety (IOS): 5 tasks, one devoted to selection, pilot study and adjustment of a proactive organizational culture/safety culture assessment methodology (NOMAC)
    - Successfully applied in SNPPs (pilot study / SC Programs / SC Action Plans)
Regulatory approach to Safety Culture Oversight

Proactive approach

Program based oversight

Reactive Approach

Events Follow-up

Results based approach

Safety Culture in SISC
Regulatory approach to Safety Culture Oversight

Proactive approach

Program based oversight

Reactive Approach

Events Follow-up

Goal → promote licensees accountability of their own SC assessment and improvement, through SC Programs

Results based approach

Safety Culture in SISC
Proactive approach

Spanish NPPs SC programs

Regulatory Requirements
- NPP License Renewals
- CSN IS

SC Oversight
- SISC HOF Inspections
- NPP License Renewals evaluation

Spanish nuclear industry guides on SC Programs
Regulatory approach to Safety Culture Oversight

Proactive approach

Reactives Approach

Events Follow-up

Goal → follow up licensees response to events involving SC and organizational issues

Program based oversight

Results based approach

Safety Culture in SISC
Regulatory approach to Safety Culture Oversight

Proactive approach

Program based oversight

Reactive Approach

Events Follow-up

Results based approach

Goal ➔ gather information on licensees SC, through SISC tools, in order to take actions when necessary
Regulatory approach to Safety Culture Oversight

Results based approach

Safety Culture in SISC

Finding? ⇒ CC

CC a

SCC?

Supervision: Inspección Suplementaria de grado 1 (o una adicional si se hubiera realizado)

Supervision: Inspección Suplementaria de grado 2 (o una adicional si se hubiera realizado)

Supervision: Inspección Suplementaria de grado 3 (o una adicional si se hubiera realizado)

Se valorará iniciar evaluaciones adicionales independientes de CS o de aspectos puntuales, antes del reanudamiento

Supervisión de evaluaciones, plan de mejora, implantación y eficacia

Se valorará requerir evaluación específica de CS y Plan de mejora

Se valorará iniciar una segunda evaluación independiente de CS o de aspectos puntuales

Supervisión de evaluaciones, plan de mejora, implantación y eficacia

Pilot study: one year starting 1/07/2014

Results based approach
Safety Culture Definition

- Set of beliefs, assumptions and values with impact on safety and shared by the organization members, along with the behaviors and expressions in which they become apparent.

Crosscutting components

- Decision Making
- Resources
- Communication and Cohesion
- Work Planning and Coordination
- Work Practices and Supervision
- Roles and Responsibilities
- Continuous Learning Environment
- Organizational Change Management
- Policies and Strategies Oriented to Safety
- Problems and Areas for Improvement Identification
- Problems and Areas for Improvement Evaluation
- Problems and Areas for Improvement Resolution
- Safety Conscious Work Environment

(Organizational) Safety Culture: Set of beliefs, assumptions and values with impact on safety and shared by the organization members, along with their surfacing behaviors and expressions.
3 Final considerations

- **Main focus**
  - To assure that the licensees have, by themselves, the capability to maintain and improve their SC through their own Programs. Their commitment and involvement is essential.

- **First priority**
  - To make senior managers understand SC relevance for the NPPs business, and their influence on its improvement/decline.

- **Work with the industry**
  - Need for an open and strong cooperation between licensees and regulatory body.

- **Regulatory approach:**
  - A proactive approach to SC is beneficial for safety. Notwithstanding, as regulators, and taking into account the difficulties of the oversight task in SC, there is a need for complementary (and mutually dependent) approaches at the time (proactive, reactive, and performance based).
Thank you for your attention!!!!